

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/806,452

Atty Docket No.: Q76445

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1. (currently amended): An ink containing a-water, a water-soluble organic solvent, a dye, a non-ionic surfactant and a betaine compound, wherein the dye has at least two heterocyclic groups and at least one of the heterocyclic groups contains at least one of pyridine, thiophene, thiazole, benzothiazole, benzoxazole and furan rings.

Claim 2. (canceled).

Claim 3. (currently amended): The ink according to claim 12, wherein the betaine compound is a compound represented by the following formula (1):



wherein R represents a hydrogen atom, an alkyl group, an aryl group or a heterocyclic group; L represents a divalent linking group; M represents a hydrogen atom, an alkali metal atom, an ammonium group, a protonated organic amine- or nitrogen-containing heterocyclic group or a quaternary ammonium ion group, provided that when p+r is 4, one of M's is not present; q is an integer of 1 or more, r is an integer of from 1 to 4, k is an integer of from 0 to 4, m is an integer of 1 or more, and p is an integer of from 0 to 4, provided that p+r is 3 or 4; in a case where p+r is 4, the N atom is a protonated ammonium atom; in a case where m is 2 or more, L's may be either the same or different; in a case where q is 2 or more, COOM's may be either the same or

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/806,452

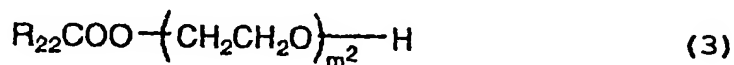
Atty Docket No.: Q76445

different; in a case where r is 2 or more, $L^m-(COOM)_q$'s may be either the same or different; in a case where k is 2 or more, R 's may be either the same or different; and in a case where p is 2 or more, R^k 's may be either the same or different.

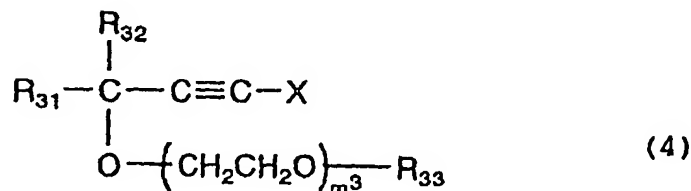
Claim 4. (currently amended): The ink according to claim 12, wherein the nonionic surfactant is a compound selected from compounds represented by the following formulae (2) to (4):



wherein R_{21} represents an alkyl group having from 5 to 40 carbon atoms; and m^1 represents an average number of ethylene oxide moles added which ranges from 2 to 40;



wherein R_{22} represents an alkyl group having from 5 to 40 carbon atoms; and m^2 represents an average number of ethylene oxide moles added which ranges from 2 to 40; and

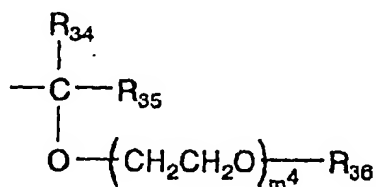


AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/806,452

Atty Docket No.: Q76445

wherein R_{31} and R_{32} each independently represent an alkyl group having from 1 to 18 carbon atoms; R_{33} represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms or a phenyl group; and X represents a hydrogen atom or



wherein R_{34} and R_{35} each independently represent an alkyl group having from 1 to 18 carbon atoms; R_{36} represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms or a phenyl group; and m^3 and m^4 each independently represent an average number of ethylene oxide moles added provided that m^3+m^4 is from 0 to 100;

in a case where m^3 is 0, R_{33} represents a hydrogen atom; in a case where m^4 is 0, R_{36} represents a hydrogen atom; and in a case where X is a hydrogen atom, m^3 is from 1 to 100.

Claim 5. (original): The ink according to claim 1, wherein the betaine compound is a compound which has both of a cationic site and an anionic site in its molecule.

Claim 6. (currently amended): The ink according to claim 1, wherein the betaines has a cationic site is selected from the ~~group~~group consisting of an ~~amine~~amino nitrogen atom, a nitrogen atom in an aromatic heterocycle, a boron atom having 4 carbon-bonds, and a phosphorus atom[[,]] and ~~the~~an anionic site is selected from the group consisting of a hydroxyl group, a thio group, a sulfonamido group, a sulfo group, a carboxyl group, an imido group, a phosphate group, and a phosphonate group.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/806,452

Atty Docket No.: Q76445

Claim 7. (original): The ink according to claim 1, wherein the dye has an oxidation potential nobler than 1.0 V (vs. SCE).

Claim 8. (canceled).

Claims 9 and 10. (canceled).

Claim 11. (original): The ink according to claim 1, wherein the dye is a phthalocyanine dye containing at least one of -SO-, -SO₂-, -CO- and -CO₂-.

Claim 12. (currently amended): An ink set containing at least one of the ink according to claim 1 ~~claims 2~~.

Claim 13. (currently amended): An inkjet recording method wherein an image is recorded with an inkjet printer by using at least one of (a) an ink containing water, a water-soluble organic solvent, a dye, a betaine compound and a nonionic surfactant ~~the ink according to claim 2~~ and (b) an the ink set containing at least one ink containing water, a water-soluble organic solvent, a dye, a betaine compound and a nonionic surfactant, wherein the dye in (a) and (b) has at least two heterocyclic groups and at least one of the heterocyclic groups contains at least one of pyridine, thiophene, thiazole, benzothiazole, benzoxazole and furan rings ~~according to claim 12~~.

Claim 14. (currently amended): The ink according to ~~claim 1~~ claim 1, wherein the ink contains at least two different betaine compounds ~~further containing at least one another betaine compound~~.

Claim 15. (currently amended): An ink set containing at least one of the ink according to claim ~~claims~~ 14.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/806,452

Atty Docket No.: Q76445

Claim 16. (currently amended): (currently amended): An inkjet recording method wherein an image is recorded with an inkjet printer by using at least one of (a) an ink containing water, a water-soluble organic solvent, a dye and at least two different betaine compounds ~~the ink according to claim 14~~ and (b) an ink set containing at least one ink containing water, a water-soluble organic solvent, a dye and at least two different betaine compounds, wherein the dye in (a) and (b) has at least two heterocyclic groups and at least one of the heterocyclic groups contains at least one of pyridine, thiophene, thiazole, benzothiazole, benzoxazole and furan rings ~~according to claim 15.~~